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INTERNATIONAL FISH TRADE AND FOOD SECURITY: ISSUES AND PERSPECTIVES

John Kurien
Professor
Centre for Development Studies
Trivandrum, Kerala State, India
(kurien.john@gmail.com)

Introduction

Trade and food security are two of the most pressing and controversial themes of our times. Never before have these themes been discussed singly and jointly with such fervor by states and civil society. This is the direct result of recent globalization and the greater and quicker flow of information arising from it. Interestingly, fish has played a historically important role in early globalization which is not adequately recognized. Fish can be considered the single most important food which helped foster the early trade links between nations. Fish in its fresh, dried and canned form was the most crucial component in the diet of the sailors. Without this they would have unlikely braved the high seas to get goods across from one part of the world to another. Fish therefore played an indispensable role in the first phase of the emergence of a global economy -- much before it became an internationally traded commodity in its own right! Let's set the historical record straight. It was the plentiful supply of fish which assured the direct food security of the brave sailors and the indirect food security of the hard working women who processed it, that contributed significantly to the real foundation of the globalize world we know today.

Fish Trade Today

Today when supermarkets are laden with food from all over the world, flown into busy cargo terminals every morning and evening, fish has become one of the most widely traded primary food commodities. As much as one-third of global fish production is traded internationally. This is the highest ratio for any primary commodity. This is not only due to the high demand for fish in Europe, USA and Japan where consumers like its taste and consider it a healthy food. It is also due to a combination of two other less mentioned factors: the high perishability of the product and the fact that fishermen cannot live by fish alone. The moment a fisher has more than three or four fish for his own consumption; there is pressure to exchange the 'surplus' for money or other goods. This fosters in any fish economy a strong compulsion to engage with the market even at a very low level of development of the productive forces. Trade is innate to fisheries. Unlike farmers, even so-called 'subsistence fishermen' can be integrally linked to export markets. It is really these numerous little lots of ‘surplus’ fish, combined of course with

the larger specifically export-oriented marketable surpluses, which give rise to this high ratio of export trade to production.

In value terms, the global trade in fishery products was worth over US $ 63 billion in 2003 -- up from about US $ 6 billion in 1980. In 1980 developing countries accounted for over one-third of the value of exports. In 2003 they accounted for over half. Between 1980 and 2003, for the developing countries as a whole, the net receipts (the between the value of exports and imports) from fish trade increased from around US $3.4 billion to US $ 18 billion. This was greater than their net export value of other agricultural commodities such as coffee, bananas, rice, and tea taken together.

It may also seem a bit paradoxical, that the group of 85 countries, labeled by the FAO as Low Income Food Deficit Countries (LIFDCs), account for a significant and rising share of global fish trade. Today they account for a fifth of world fish exports.

Fish Trade and Food Security: The Issues

Food security from fish (for that matter from any food commodity) has a *direct* and an *indirect* dimension to it. Fish as food on the plate, that's direct. Fish as a source of livelihood and income, that's indirect. When we examine the food security implications of trade we must look at both these dimensions.

To consider fishery products as food, they must be viewed more like the category of fruits. They are composed of items of very wide diversity – from whale meat and shark fins to shrimp, anchovies and scallops. They vary in appearance and taste. However, their nutritional values are broadly similar, particularly with reference to their protein content.. Globally, fish contributes to about 15-16 percent of the total animal protein consumption by humans. In the LIFDCs as a whole, it is about 20 percent and in Asia about 23 percent. The attribute that varies most with regard to fishery products is price. The price ratio between blue fin tuna and anchovies can be of the order of 200 to one. However, both are fish. Both are delicacies. The former for the well-to-do Japanese. The latter for the poor Indian. Blue fin tuna are fish for *'luxury consumption'* and anchovies are fish for *'nutritional consumption'*. When we consider direct food security issues we deal only with the latter.

Fish can contribute importantly to direct nutritional food security in countries where the staple crop is particularly low in protein – such as cassava or plantain. In many parts of Africa, fish that are rich in proteins and fat, may be essential especially in the diets of young children, infants and pregnant women. A small quantity of fish can contribute to increasing staple consumption by improving the overall palatability of the food and also adding to its nutritive value. For children, whose small stomachs cannot digest the bulk of starchy staples, incorporation of a small quantity of fish can substantially improve the biological value of the diet and contribute to better nutrition. However, it is not adequate to have the *need* for food. To translate into food security, this need must be backed by

effective *demand* in the form of purchasing power. This is lacking among many potential consumers of fish in developing countries. Moreover, even if fish were accessible and affordable there is another factor to consider. If people live in adverse environmental surroundings giving rise to poor health conditions, their bodies cannot absorb rich proteins.

Therefore, to achieve genuine food security three conditions must be satisfied. People must have the ability to always *access, afford and absorb* the food they wish to eat. Much has been written about channelising unutilized fishery resources through trade to the vast numbers of hungry people in the world. For the reasons we have enumerated, this is obviously easier said than achieved!

Fish also contributes indirectly to food security. Fish generates livelihoods, employment and income through the activities of harvesting, processing and marketing. These activities attain great significance along the coastal and other riparian tracts of developing countries in general and the LIFDCs in particular. Estimates of the number of people involved in these activities vary widely. The FAO estimates that there are 35 million fishers and assumes three people in fish-related jobs for each fisher. The number of fish workers therefore number over 100 million.

The relationship between fish trade (exports and imports) and food security is more complex and not necessarily always positive. Production for exports can enhance the incomes of poor fishers substantially. This raises their purchasing power to achieve greater food security. As an extreme example consider the case in Gujarat in India. Most marine fishermen there are vegetarians and do not eat the fish they catch. The domestic consumers are also vegetarians. Fish is a 'cash crop', only the income from its sale matters. Nearly all of it must be exported to realize this objective.

On the other hand, in a country where fish is an integral part of the culturally conditioned diet of the domestic population, fish exports may reduce the direct food security of domestic consumers. In such cases demand is likely to be relatively price inelastic. In such cases, if supply is less than effective demand by even a very small margin, the price of fish will increase sharply. This can lead to undesirable nutritional consequences especially for the poorer fish consumers. Exports will be perceived to have an adverse impact on food security.

Exports can also be based on new sources of fish production such as a newly accessed species at sea, or from aquaculture. Consequently the direct, adverse food security implications of trade need not necessarily arise or be so severe. To export fish, further processing will be required. This creates more, often new, employment and enhances income particularly among women. It is now well established that women's earnings from employment tends to contribute more to family welfare and food security.

Imports, particularly when they are for nutritional consumption, can help to stabilize or reduce fish prices. This benefits poor fish consumers. However, imports can have an adverse effect on the income of fishers in the importing country. It may lower the price they receive for the fish they harvest and thus lower their food security. As a response, they may begin to exploit the local fish stock heavily, possibly to its ruin. Alternatively, women fish processors in that country (maybe even wives of fishers) may get additional employment by processing this imported fish. Imports may also be entirely for re-exporting after value-added processing. This then enhances indirect food security.

From what I have stated above it will be abundantly clear that whether fish trade will lead to direct or indirect, enhanced or reduced food security can be hard to access. Many pathways are possible. Making global generalizations may be difficult. At times even meaningless. Specificity is important. So also is perspective.

Fish Trade and Food Security: The Perspectives

There are at least five important perspectives from which we can examine the issue of fish trade (exports and imports) and food security even when we examine the context of a single country. There can be the perspective of the nation, the fishers, the fishworkers, the fish consumers and the fish resource. It is very important to bear this in mind. A recent study which I coordinated for the FAO with the financial support of the Ministry of Foreign Affairs of Norway examined these perspectives for 11 developing countries across the global.[1] These countries were representative of different types of fish trade and food security scenarios. They were Nicaragua, Brazil, Chile, Senegal, Ghana, Namibia, Kenya, Sri Lanka, Thailand, Philippines and Fiji.

The National Perspective

First, let us consider the national perspective. Fish exports bring in a lot of foreign exchange for a country. This may be a very crucial source of earnings for cash strapped developing countries. These earnings may just be pooled into the national foreign exchange kitty to buy cars, oil or arms. Alternatively, some of it can be earmarked to buy other food supplies needed for the population. For example, a country may export small quantities of high valued octopus or shrimp and use the earnings to import a basic staple such as rice or wheat or meat which may be the preferred source of food. Fish imports on the other hand cost the country foreign exchange. However, the country may also adopt the approach of importing fish, processing it within the country and re-exporting it. By this option jobs are generated and people earn incomes which they use to enhance their food security and foreign exchange is generated.

[1] See <http://www.tradefoodfish.org> for a draft version. The final version will be available in print soon.

The study of the 11 countries revealed how important fish trade was for most of them. Fish exports were among the 10 top foreign exchange earners for as many as eight of the countries. (Thailand, Ghana, Kenya, Namibia, Senegal, Chile, Nicaragua, Fiji.) Four of the countries -- Nicaragua, Senegal, Ghana and Kenya -- are currently classified as Heavily Indebted Poor Countries. For them the foreign exchange earned from fish was more than adequate to cover their annual debt service payments. In a non-fish eating poor country like Nicaragua, blessed with large fishery resources, what better option could there be? In countries like Brazil, despite the availability of fish resources, the country is the largest fish importer in Latin America. This is a case of a country catering to the 'luxury consumption' needs of its wealthy population who have a strong preference for fish species that are not available in Brazil. This has resulted in a consistent trade deficit in fish. Sri Lanka on the other hand, exports its high value species to earn foreign exchange and in turn imports the preferred low value species for the 'nutritional consumption' of the poorer consumers. But despite this they have a growing trade surplus in fish.

The Fishers Perspective

Secondly there is the perspective of the fishers. Other things being equal, fish that is exported usually gives the fisher a better earning because export prices tend to be higher. Given a choice between selling fish to the domestic market and exporting it, fishers the world over tend to choose the latter. They can use these higher earnings to buy more and varied food items for their family. Fishers therefore generally favor exports.

In the 11 countries the fishers' perspective of fish trade and its impact on their food security was a very mixed bag. For one it is very difficult to assess on a countrywide basis the effect of fish exports on the incomes of fishers. However, where they are significantly oriented to harvesting only exportable species, their incomes are considerably higher. This is likely to have increased their overall food security. We also found that fishers are faced with many 'disbenefits' as a result of fishing for exports. For example, fishers in Senegal engaged in fishing for exportable species of fish met with many fatal accidents as a result of collisions at sea with industrial vessels. In the Philippines and Sri Lanka fishers in hot pursuit of tuna, for export to Japan, infringe inadvertently into other country EEZs and are arrested and put in jail. On balance it is therefore difficult to make any firm conclusions on the benefits or otherwise in this regard. Much more data needs to be collected.

The Fishworkers Perspective

Thirdly there is the perspective of the fish workers. Fish, which is exported, or imported for, re-exports, generates a lot of employment and reasonably good earnings in the processing sector, particularly for women.

The impact of fish trade on fishworkers is one realm where the information from all the 11 countries provides good news. Significant new employment has been created as a result of the fish processing and marketing activities arising as a result of international trade. One notable feature is that it is mostly young women who get these jobs. Thailand, Philippines and Namibia are the best examples. Another feature is that these women are most often from poorer rural areas where other job opportunities are scarce. These new jobs have given hopes to many families and enhanced the food security of many thousands of people. In a minimalist sense, this shows the potential for international trade to become a potential engine for income poverty reduction. Also, due to the global harmonized standards in the fish processing plants arising from HACCP specifications, the physical working conditions are good irrespective of the country. Such enforced cleanliness may have demonstration effects at home and this is good for the families. Even in this context there are many downsides. The workers may not have social security. They may not be allowed to organize into trade unions. Their jobs may be seasonal.

There is small twist to the perspective of the fishworkers that we must highlight. As a result of growing diversion of fish into international trade, in some countries, a significant number of women who were earlier involved in fish processing for the domestic market have been adversely affected. They do not get fish to undertake their traditional processing because they cannot offer the fishermen the price paid by the exporters. The most glaring examples of this adverse effect come from Kenya and Ghana. The compulsion to export resulted in fish being priced out of the hands of elderly traditional fishworkers. This resulted in loss of income and food security for them. On the other hand it created jobs and gave higher wages to younger women in the modern fish processing plants. These are the paradoxes of trade. It also highlights an important feature of any impact assessment. Viewing the context as a whole highlights the net benefits. Examining the parts reveal the plight of many losers.

The Fish Consumers Perspective

Fourthly there is the perspective of the fish consumer. It is the fish consumers' perspective of the impact of international fish trade on food security which is most commonly highlighted in current literature. The usual argument is that as export trade increases, the fish available for local consumption decreases and this is detrimental to the food security of poor consumers. As a general statement this is valid. However, the moment you contextualize it within the real situation of a country we have different scenarios. In Kenya, following the export-orientation of Nile Perch, the local consumers, particularly the poor, were severely deprived of fish. There is evidence that this seriously affected their nutritional status. However, in Namibia where people don't eat fish, exports have no adverse impact on consumers' nutritional status. On the contrary, because the fish exports have raised the incomes of fishers and fishworkers, they now buy more meat and other foods and have improved their direct food security.

Consider another very interesting case. In Nicaragua the majority of the population do not eat fish. However a vast number of them are poor and hungry. Fishery resources are plentiful. Fish exports are on the rise. The country exemplifies an important point about the cultural conditioning of food preferences. Because people are poor, it does not mean they will eat *any* good food which is offered to them or which is accessible and affordable. The simultaneous presence of a nutritious food resource -- such as fish -- and hungry people may be ethically unsettling. But at the local level this paradox can be socially and culturally compatible. The earlier Sandinista government did perceive the potential of the vast fishery resources as a source of foreign exchange earnings and a basis for livelihood and food security. They made significant efforts at the national and the local levels to encourage the use of fish to solve the problems of poverty and malnutrition. Subsequent regimes have been driven exclusively by market considerations. Despite the fragile macro-economic situation, Nicaragua imports gourmet seafood for luxury consumption of the very wealthy citizens and the expatriates. Fish exports today yield valuable foreign exchange and contribute significantly to debt repayments. However, there was no evidence that the option of using some of these earnings to provide the preferred proteins for the poor is being exercised.

The Fish Resource Perspective

Finally there is the perspective of the fish resources. If we share the view of equal rights to all species on earth, then the perspective of the fish about international fish trade is important! In fact, it is this fish perspective which is uniform across the 11 countries studied. There appears an uncanny relationship between a fish-specie entering international trade and it being overfished! The long-term sustainability of international fish trade depends on the sustainability of the fishery resource. This is a plain truth. The evidence from the case studies, points unequivocally to the failure of the humans in the fishery sector to take cognizance of this. However, thankfully there is a bright side to this failure. It is now motivating fishers in many countries to take collective action to set the situation right.

The artisanal lobster fishermen in Brazil have campaigned against destructive fishing practices and taken steps to establish greater control of the first sale of lobsters. They are making direct contacts with exporters and soliciting support from the consumers in the US. The recent governance changes in the Philippines have created an organizational structure called the Fisheries and Aquatic Resource Management Councils. They are nested from the village level upwards to the national level – a micro-global link. These changes have been in response to two decades of struggles by small-scale fishers to gain control over the coastal resources. Such structures are creating the scaffolding for initiating measures to move towards sustainable harvesting of fishery products.

These examples can be stepping stones towards attuning new approaches to modulating trade, technology and property rights towards the specificities of nature and the basic needs of the majority. Such a symbiosis is a necessary condition to ensure that the

integrity of the resource base is maintained. This is the only enduring way to have both the gains from trade and the fruits of food security benefits spread to all.

End Thoughts

Trade is innate to fisheries. International trade in fisheries is bound to increase in future. Fish and fish trade can contribute greatly to food security. The gains of international trade are skewed. It can enhance and reduce food security at the same instant for different segments of the population. Making fish trade more inclusive and enhancing its overall positive contribution to both direct and indirect food security must be the goal for global fish trade. This calls for a guided and informed set of policies and their practice. Only truly responsible fisheries initiatives -- those that are accountable, rational and trustworthy -- can achieve this. Let this be our endeavor.